

Exhibit "S"



**MEDICINE**



# COVID-19 RESPONSE SUMMARY

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Senior Vice President and Chief Operating Officer

# MISSION

## Oklahoma State University

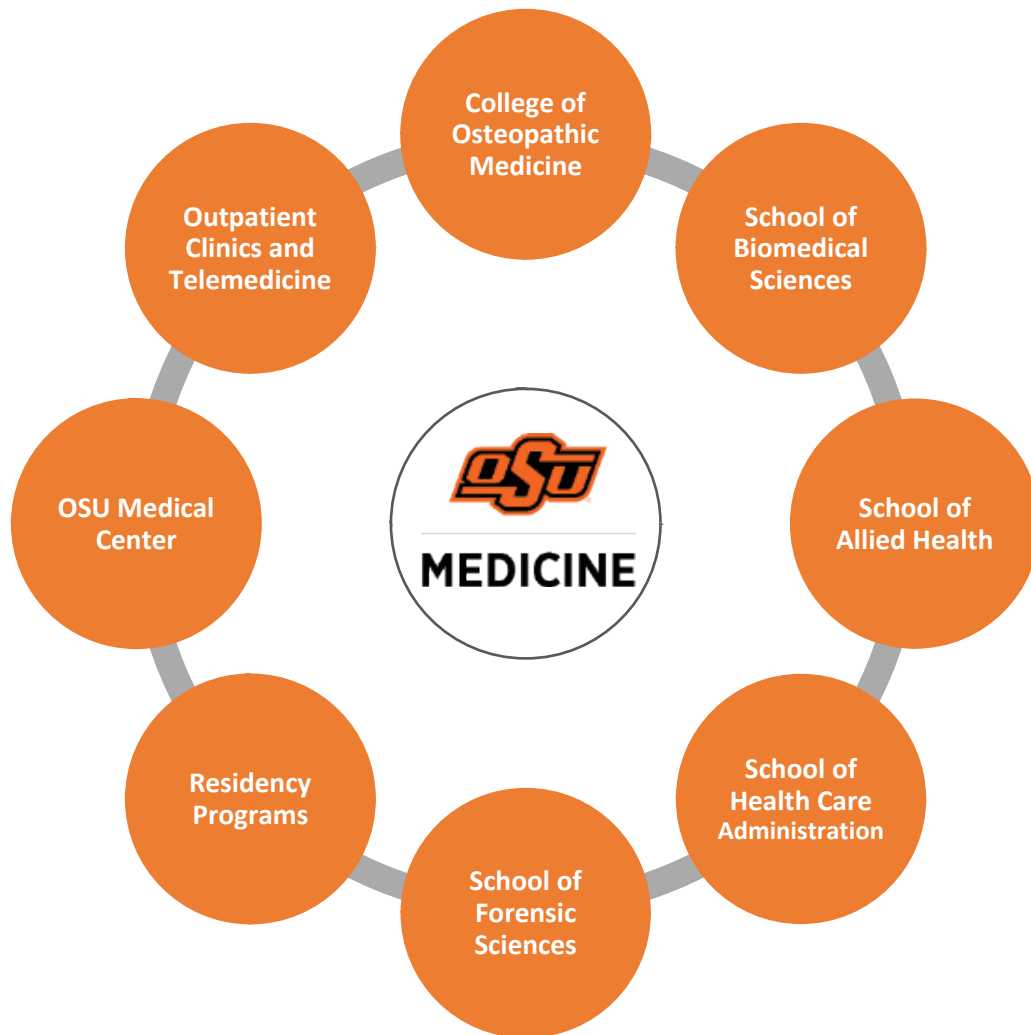
Building on its **land-grant** heritage, Oklahoma State University promotes learning, advances knowledge, enriches lives, and stimulates economic development through teaching, research, extension, outreach and creative activities.



## OSU Medicine

Oklahoma State University Medicine educates and trains osteopathic physicians, research scientists, and other health care professionals with an emphasis on serving **rural and underserved Oklahoma**.

# OSU MEDICINE: OVERVIEW



## Education Provider

- Over 1,000 medical and professional students
- Osteopathic medicine, master's, doctorate and certificate academic programs

## Residency Programs

- 9 residency training sites across the state
- 340+ residents training under OSU Medicine's purview

## Health Care Delivery System

- OSU Medical Center
- 28 outpatient clinics
- Telemedicine network

## Research Enterprise

- Clinical research
- Biomedical research
- Public health research

# OSU MEDICINE RESPONDS TO COVID-19

- **Statewide Leadership.** Dr. Kayse Shrum, President of OSU Center for Health Sciences, joins Governor Stitt's COVID-19 Solutions Task Force.
- **Testing Capacity.** OSU Medicine expands the state's COVID-19 testing capacity on March 30<sup>th</sup>, by 45x (350 to 16,000 tests).
- **Knowledge Sharing.** OSU Medicine launches COVID-19 ECHO service line on March 20<sup>th</sup>. Sessions are held 3 times each week at no cost to the participant.
- **Primary Care Capacity.** OSU Medicine launches telemedicine network to support providers overwhelmed by COVID-19 patients.
- **Treatment Expertise.** OSU Medicine proposes that OSU Medical Center be designated as a COVID-19 hospital.



# LEADING IN TIMES OF CRISIS



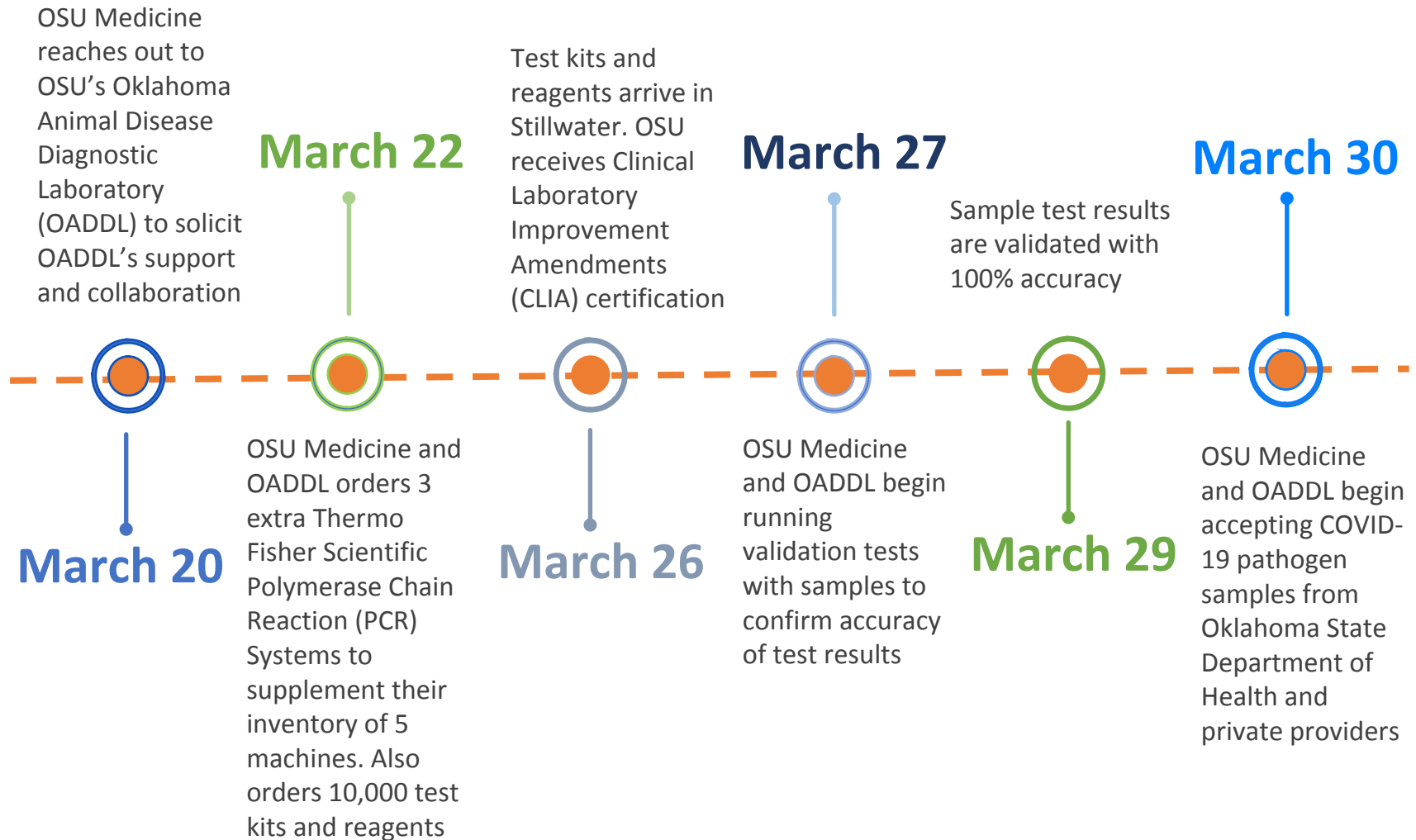
## DR. KAYSE SHRUM

Statewide testing, PPE procurement, provider readiness, modeling, surge planning, crisis care standards documentation, etc.

# COVID-19 TESTING CHALLENGES

- 1. Imposed Testing Limitations.** From January – mid March, CDC was the only entity that initially could confirm COVID-19 infections.
- 2. Faulty Testing Kits.** Publicly available test kits had faulty reagents, creating a nationwide shortage of test kits.
- 3. Shortage of Lab Testing Materials.** In early March, the Food and Drug Administration issues Emergency Use Authorization to allow certified laboratories to develop diagnostic tests for COVID-19, resulting in an avalanche of commercial and university laboratories launching COVID-19 testing labs. National and global demand creates supply chain pressure on testing kits and reagents.

# TIMELINE TO DEVELOP OSU'S TESTING CAPABILITY



# HOW COVID-19 TESTING WORKS

1



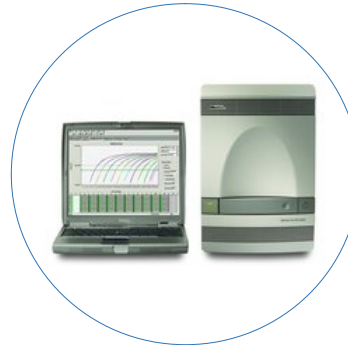
Samples are collected by a provider from the nose or throat of patient using a swab. Provider calls OSU Diagnostic Laboratory to schedule pick up.

2



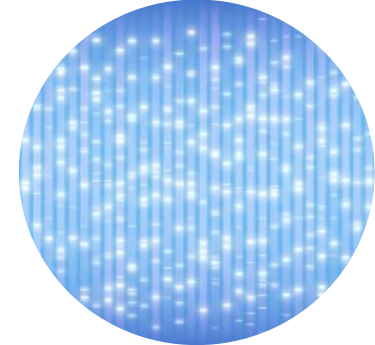
Medical courier picks up sample and delivers samples to OSU Diagnostic Laboratory in Stillwater.

3



Sample is mixed with chemical reagents to isolate the RNA and put in a PCR machine to duplicate the genetic material of the virus.

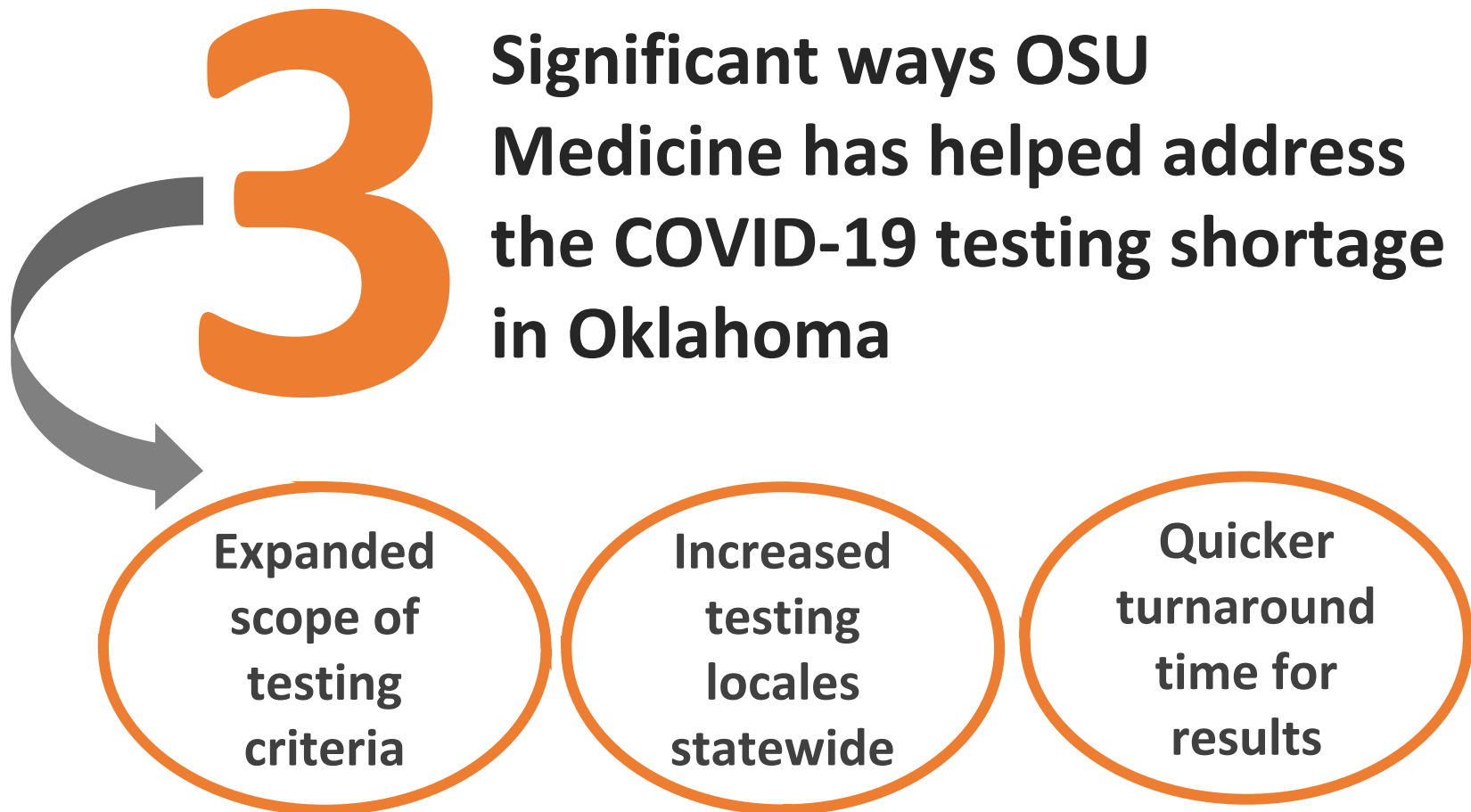
4



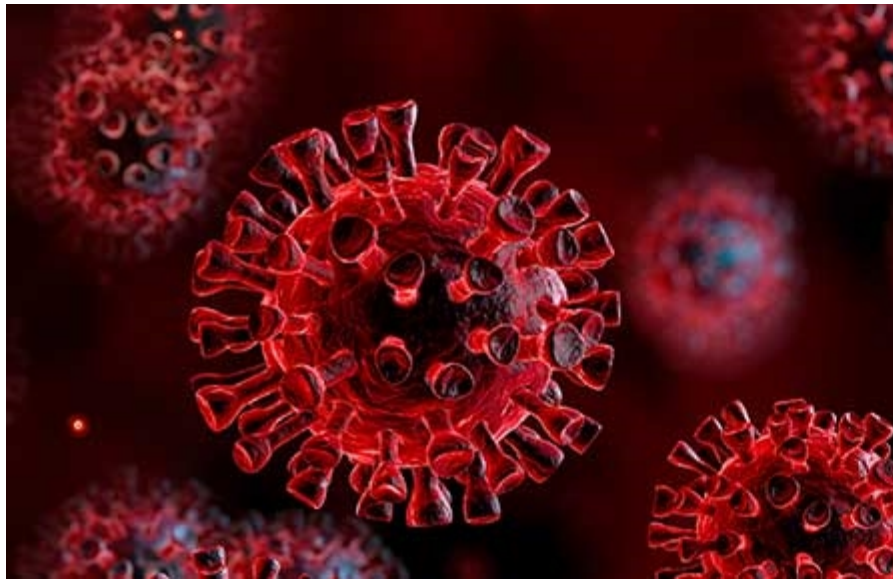
If the virus exist, the copies made by the machine will amplify its presence.



# IMPACT OF OSU'S TESTING CAPACITY



# EXPANDING CARE CAPACITY & EXPERTISE



**Project  
ECHO** COVID-19



**TELEHEALTH SOLUTION**  
OKLAHOMA STATE UNIVERSITY

# OSUMC: POTENTIAL SPECIAL DESIGNATION



## Proposed COVID-19 Designated Hospital

- Operational efficiency and scalability
- Centralize resources
- Develop medical expertise
- Mitigate cross-contamination and infection control